

In the Claims

Claim 1 (previously presented). A particle comprising a complex of chitosan, or a chitosan derivative; a lipid; and a polynucleotide.

Claim 2 (previously presented). The particle of claim 1, wherein said particle is a nanoparticle.

Claim 3 (previously presented). The particle of claim 1, wherein said polynucleotide encodes a cytokine.

Claim 4 (previously presented). The particle of claim 1, wherein said polynucleotide encodes interferon gamma.

Claim 5 (previously presented). A composition comprising a particle and a pharmaceutically acceptable carrier, wherein said particle comprises a complex of chitosan, or a chitosan derivative, a lipid, and a polynucleotide.

Claim 6 (previously presented). The composition of claim 5, wherein said particle is a nanoparticle.

Claim 7 (previously presented). The composition of claim 5, wherein said polynucleotide encodes a cytokine.

Claim 8 (previously presented). The composition of claim 5, wherein said polynucleotide encodes interferon gamma.

Claim 9 (cancelled)

Claim 10 (currently amended). A method for delivery and expression of a polynucleotide within a mammal, said method comprising administering a particle to the mammal, wherein ~~the~~ said particle comprises a complex of chitosan, or a chitosan derivative, a lipid, and a polynucleotide, wherein ~~the~~ said polynucleotide is expressed in the mammal.

Claim 11 (currently amended). The method of claim 10, wherein ~~the~~ said particle is a nanoparticle.

Claim 12 (currently amended). The method of claim 10, wherein ~~the~~ said polynucleotide encodes a cytokine.

Claim 13 (currently amended). The method of claim 10, wherein ~~the~~ said polynucleotide encodes interferon gamma.

Claims 14-15 (cancelled)

Claim 16 (currently amended). The method of claim 10, wherein ~~the~~ said particle is administered within a composition comprising a pharmaceutically acceptable carrier.

Claim 17 (currently amended). A method for enhancing interferon-gamma expression to regulate the production of cytokines secreted by T-helper type 2 (Th2) cells, said method comprising administering an effective amount of a particle to a mammal, wherein ~~the~~ said particle comprises chitosan, or a chitosan derivative, a lipid, and a polynucleotide encoding interferon-gamma, and wherein ~~the~~ said polynucleotide is expressed, thereby producing interferon-gamma in the mammal.

Claim 18 (previously presented). The method of claim 17, wherein the mammal is human.

Claim 19 (previously presented). The method of claim 17, wherein the mammal is suffering from asthma.

Claim 20 (currently amended). The method of claim 17, wherein ~~the~~ said particle is administered to the respiratory tract of the mammal.

Claim 21 (currently amended). A method for producing a particle comprising a complex of chitosan, or a chitosan derivative thereof, a lipid, and a polynucleotide, said method comprising mixing ~~the~~ said polynucleotide, ~~the~~ said lipid, and ~~the~~ said chitosan or chitosan derivative, to form ~~the~~ said particle.

Claims 22-23 (cancelled)

Claim 24 (currently amended). The method of claim 10, wherein ~~the~~ said particle is administered intranasally.

Claim 25 (currently amended). The particle of claim 1, wherein ~~the~~ said lipid is a cationic lipid ~~or phospholipid~~.

Claim 26 (currently amended). The particle of claim 1, wherein ~~the~~ said particle comprises chitosan.

Claim 27 (new). The particle of claim 1, wherein said particle comprises a chitosan derivative.

Claim 28 (new). The particle of claim 1, wherein said lipid is a phospholipid.

Claim 29 (new). The particle according to claim 1, wherein said polynucleotide is surrounded by a monolayer of said lipid.

Claim 30 (new). The method according to claim 10, wherein said particle comprises a chitosan derivative.

Claim 31 (new). The method according to claim 10, wherein the mammal is human.

Claim 32 (new). The method according to claim 10, wherein said particle is administered to the respiratory tract of the mammal.

Claim 33 (new). The method according to claim 17, wherein said particle is administered intranasally.

Claim 34 (new). The method according to claim 17, wherein said particle comprises a chitosan derivative.

Claim 35 (new). The method according to claim 21, wherein said polynucleotide encodes interferon gamma.

Claim 36 (new). The method according to claim 21, wherein said particle comprises a chitosan derivative.